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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,190	06/20/2003	Keith J. Brodie	M-15536-3C US	8790

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EXAMINER	
MANCHO, RONNIE M	
ART UNIT	PAPER NUMBER
3663	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/600,190	BRODIE, KEITH J.	
	Examiner	Art Unit	
	Ronnie Mancho	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 10-42* is/are pending in the application.

4a) Of the above claim(s) *10-42* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6611757; claims 1-20 of U.S. Patent No. 6427121; claims 1-11 of U.S. Patent No. 6301545. Although the conflicting claims are not identical, they are not patentably distinct from each other because the structure of the claimed subject matter of the present application is disclosed in the above named patents. As an example, the above named patents all disclose an interrogator and a transponder which are capable of performing the steps disclosed in the present application..

3. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 2002/0138199, and claims 1-23 of copending Application No. 2001/0039475. Although the

conflicting claims are not identical, they are not patentably distinct from each other because the claims of the application encompass the claims of the PG publication.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what all is meant and encompassed by the phrase, "the correlation snap shot comprises ..... a range offset in chips". The attachment of the phrase, "a range offset" to the term "chips" is not known in the art and confuses the scope of the claim. Although the specification disclose the above phrase, there is no explanation of the meaning of "a range offset in chips". . In The rest of the claims are rejected for depending on a rejected base claim.

6. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 8, the applicant has changes "a set of fixed point correlator sums" to "correlator sums". This is new matter. Applicant's original invention particularly called for "a set of fixed point correlator sums", not just any other "correlator sums".

In claim 5, the applicant has changed "passive standby circuit" to "standby circuit". The original disclosure particularly called for "passive standby circuit" not just any other "standby circuit". This is new matter.

The rest of the claims are rejected for depending on a rejected base claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 1-3, 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Krasner (5781156)

Regarding claim 1, Krasner discloses a communications system (fig. 1A) for determining the position of an object (20, mobile remote unit), said system comprising:

an interrogator (10, base or reference station) remote from the object (object, col. 4, lines 29-39; pager system, col. 6, lines 16-27), the interrogator including circuits that:

receive GPS signals from GPS satellites (see GPS antenna 12, fig. 1; col. 7, lines 57-60);

for one of the GPS satellites associated with the GPS signals, transmit pre-positioning data (i.e. positioning data e.g. Doppler shifts, pseudorange "col. 6, line 25", etc is pre-established or computed first by the interrogator i.e. "base station 10" and sent to the object 20 before an accurate position of the object 20 is computed using the pre-computed sent data. See data link 16, fig. 1A) for the GPS satellite, including a pseudorandom noise (PRN) code number (see unique Gold code or C/A code for civilian applications, col. 2, lines 2-14, i.e. each satellite is given a number or unique Gold code for identification of that particular satellite; col. 11, lines 17-21; col. 5, lines 66 to col. 6, lines 1-2), a Doppler frequency offset (col. 11, lines 60-66) and a code phase offset (col. 11, lines 28-35; col. 5, lines 66 to col. 6, lines 1-2) and a tracking signal (see satellite identity, col. 6, lines 21-26; col. 11, lines 61-66) including reference time (epoch, col. 5, lines 66 to col. 6, lines 1-2) and frequency information (col. 11, lines 17-20; col. 5, lines 66 to col. 6, lines 1-10); and

determine a pseudorange (col. 11, lines 28-35) associated with a received correlation snapshot (a snap shot is the collection of data such as PRN or PN frames in a given period of time; col. 11, lines 28-35; col. 12, lines 10-12), wherein the correlation snap shot comprises correlator sums and a range offset in chips; and

a transponder (mobile unit 20 is positioned on or carried by an object since it is mobile) positioned on the object (object, col. 4, lines 29-39; pager system, col. 6, lines 16-27; col.), the transponder adapted to:

receive (i.e. at 26, 22) the pre-positioning data and the tracking signal (see data link 16, fig. 1A; col. 11, lines 61 thru col. 12);

collect RF samples of the GPS signals (col. 11, lines 61 thru col. 12);

correlate (col. 12, lines 61-67) the RF samples of the GPS signal against replicas of a GPS signal based on the PRN code number, the Doppler frequency offset, and the code phase offset in the pre-positioning data and the reference time and frequency information in the tracking signal to produce the correlation snapshot (col. 1, lines 66 thru col. 2, lines 1+; col. 12, lines 61+); and

transmit (fig. 3, col. 12, lines 49 thru col. 13, lines 1+) the correlation snapshot to the interrogator (10, base or reference station).

Regarding claim 2, Krasner discloses the system of claim 1 wherein the transponder (all the circuit blocks disposed on mobile unit 20) comprises a two-bit (e.g. 1 or 0; col. 10, lines 37-40; fig. 2A) sampler for collecting the RF samples.

Regarding claim 3, Krasner discloses the system of claim 1 wherein the interrogator 10 is further adapted to transmit a wake-up signal (command to initialize, col. 11, lines 61-65; initialization data, col. 6, lines 16-30) prior to transmitting the pre-positioning data and the tracking signal, and the transponder (i.e. all the circuit blocks disposed on mobile unit 20) comprises:

processing circuitry (fig. 1A); and

a power subsystem adapted to maintain the processing circuitry in a power-off mode prior to receipt of the wake-up signal (col. 5, lines 39-51).

Regarding claim 8, Krasner discloses the system of claim 1 wherein the code replicas (col. 12, lines 7-28; see repetitive signal; col. 1, lines 65 thru col. 2, lines 1-25) are generated by the transponder (i.e. all the circuit blocks disposed on mobile unit 20) at regular offsets (repetition period of 1023 chips, col. 2, lines 6) of some fraction of a C/A code chip.

In claims 1-8, the statements of intended use or field of use, "receive", "associate", "determine", "collect", "correlate", "transmit", "transmit a wake-up signal prior to", "maintain", "switched off", etc clauses are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

The disclosed prior art is capable of performing the above mentioned method or intended use limitations.

Response to Arguments

9. Applicant's arguments filed 12/22/06 have been fully considered but they are not all persuasive.

The applicant contends that the double patenting rejection premature because the claims have not been allowed. The rejection is maintained. Upon submission of a terminal disclaimer upon allowance of the claims, the rejection will be removed.

The applicant is arguing that the terms "correlation sums" and "chips" are terms readily understood in the art. It is noted that although the terms are known in the art, the applicant's original disclosure instead call for the terms "*a set of fixed point* correlator sums" and "*passive* standby circuit" which are different from "correlation sums" and "chips". Applicant has not provided the basis or meaning the phrase "*a set of fixed point*s" in the claimed "*a set of fixed*

point correlator sums". Applicant has also not provided the basis or meaning the phrase the "paasive" in the claimed "passive standby circuit. Applicant's arguments are focused on new terms not found in the original disclosure.

The applicant further argues that the examiner cited sections that teach functions performed by DSP 32 which the prior art discloses to be part of mobile or remote unit 20. It is noted that intended use functions in an apparatus claim do not serve to patentably distinguish the invention from the prior art, see MPEP 2114. Further, it is noted that the cited sections not only disclose functions performed by the DPS of remote unit 20, but also functions performed by circuits of the base station. As can be clearly seen in the prior art (fig 1A; col. 11, lines 40-67, etc) it is indicated that the circuits of the base station exchange data or signals with circuits of the remote unit 20. The cited sections in the rejections teach the claimed method steps as pointed out in the rejection. It is further noted that even if the prior art did not teach the contended method steps, which the examiner is not conceding, the prior art is only required to be capable of performing the contended limitations in applicant's apparatus claims.

The rejections are proper and thus stand.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronnie Mancho

Examiner
Art Unit 3663

3/15/07

JACK KEITH
SUPERVISORY PATENT EXAMINER